UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,179	08/26/2003	Yixin Diao	YOR920030088US1	4426

7590 03/03/2009

Ryan, Mason & Lewis, LLP
90 Forest Avenue
Locust Valley, NY 11560

EXAMINER	
OCHOA, JUAN CARLOS	
ART UNIT	PAPER NUMBER
2123	

MAIL DATE	DELIVERY MODE
03/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/648,179
Filing Date: August 26, 2003
Appellant(s): DIAO ET AL.

William E. Lewis (Reg. No. 39,274)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed November 4, 2008 and December 1, 2008 appealing from the Final Rejection Office action mailed 05/15/2008 and Advisory Action mailed 07/31/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The Appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Bigus et al., (Bigus hereinafter), "AutoTune: A Generic Agent for Automated Performance Tuning", 2000, Practical Application of Intelligent Agents and Multi Agent Technology, pgs:1-20

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1–33 are rejected under 35 U.S.C. 102(b) as being anticipated by Bigus.

As to claim 1, Bigus discloses a method of constructing a model representative of a resource for use in managing a service associated with the resource (see page 2, last paragraph, line 1 and page 3, 1st paragraph, lines 3–4), comprising the steps of: associating a resource abstract model with the resource, wherein the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered (see page 11, lines 6–10), and constructing the model representative of the resource based on reduced the set of resource metrics obtained in accordance with the resource abstract model (see page 5, last paragraph and Fig. 3).

As to claim 2, Bigus discloses a method wherein the constructed model comprises a quantitative model (see page 5, last paragraph and Fig. 3).

As to claim 3, Bigus discloses a method wherein the resource abstract model is constructed by at least one <u>individual with expertise</u> associated with the resource (see "In the AutoTune application, <u>administrators</u> specify the policies used by the AutoTune agent" in page 3, last paragraph , line 1).

As to claim 4, Bigus discloses a method further comprising the step of obtaining one or more service level metrics for use in constructing the model representative of the resource (see page 4, lines 7–8).

As to claim 5, Bigus discloses a method wherein the one or more service level metrics are obtainable from one or more <u>service level agreements</u>. (See "<u>Optimization and Regulator policies</u>" in page 3, last paragraph).

As to claim 6, Bigus discloses a method further comprising the step of obtaining a topology of one or more resources used to deliver one or more services associated with the one or more service level agreements, including the resource for which the model is being constructed, for use in constructing the model representative of the resource (see page 18, last paragraph). As per the topology definition in (Application description page 7, 4th paragraph), Examiner interprets “scheduling different classes of customers on a set of distributed, heterogeneous servers to globally minimize a linear function of the per-class mean response times” as minimal set of resources that may be used in service delivery and the flows between them.

As to claim 7, Bigus discloses a method wherein the resource is an element of an autonomic computing environment (see page 19, lines 3–8). As per the autonomic definition in (Application description page 10, 1st paragraph), Examiner interprets “AutoTune, an agent-based approach to automated tuning … An AutoTune enabled target system exposes metrics for workloads (e.g., RPC arrival rates), configuration (e.g., processor speeds), and service levels (e.g., response times) as well as a means to manipulate tuning controls (e.g., admission control parameters). Our approach is to construct a generic model of the target system (e.g., by training a neural network) and from this derive a controller” as one of the goals of autonomic computing is to automate some or all of the tasks an operator would typically carry out.

As to claim 8, Bigus discloses a method wherein the constructed model is useable for (i) reporting one or more service level metrics (see page 1, lines 5–7) and (ii) automating service level compliance (see page 13, line 11).

As to claim 9, Bigus discloses a method further comprising the step of checking the accuracy of the constructed model (see page 6, next to last paragraph , last 3 lines).

As to claim 10, Bigus discloses a method wherein the accuracy checking step comprises use of change point detection (see page 6, next to last paragraph , last 3 lines).

As to claim 11, Bigus discloses an apparatus for constructing a model representative of a resource for use in managing a service associated with the resource, comprising: a memory; and at least one processor coupled to the memory and operative to (see page 14, line 12 and page 15, line 1): automatically determining, via a resource abstract model, a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered (see page 11, lines 6–10) and constructing the model representative of the resource based on the reduced set of resource metrics obtained in accordance with the resource abstract model (see page 5, last paragraph and Fig. 3).

As to claims 12–19, these claims recite an apparatus for performing the method of claims 2 and 4–10. Bigus discloses an apparatus (see page 14, line 12 and page 15, line 1) for performing a method that anticipates claims 2 and 4–10. Therefore, claims 12–19 are rejected for the same reasons given above.

As to claim 20, Bigus discloses an article of manufacture for constructing a model representative of a resource for use in managing a service associated with the resource, comprising a machine readable medium containing one or more programs which when executed implement (see page 14, line 12 and page 15, lines 1–2) the steps of: automatically determining, via a resource abstract model, a set of resource

metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered (see page 11, lines 6–10) and constructing the model representative of the resource based on the reduced set of resource metrics obtained in accordance with the resource abstract model (see page 5, last paragraph and Fig. 3).

As to claims 21–26, these claims recite an apparatus for performing the method of claims 2, 4–6, 8, and 9. Bigus discloses a machine-readable medium (see page 14, line 12 and page 15, lines 1–2) for performing a method that anticipates claims 2, 4–6, 8, and 9. Therefore, claims 21–26 are rejected for the same reasons given above.

As to claim 27, Bigus discloses a method of providing resource management services (see page 2, last paragraph, line 1 and page 3, 1st paragraph, lines 3–4), comprising the steps of: deploying one or more resource abstract models in association with one or more resources, (see page 2, last 2 lines and page 7, next to last paragraph, lines 1–2), wherein each of the one or more resource abstract models is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered (see page 11, lines 6–10); based on the one or more reduced sets of resource metrics obtained in accordance with the one or more resource abstract models, constructing one or more models representative of the one or more resources (see page 5, last paragraph and Fig. 3); and using the one or more constructed models to manage the one or more resources (see page 1, 3rd paragraph , lines 1–3).

As to claim 28, Bigus discloses a method further comprising the step of obtaining one or more service level metrics for use in constructing the one or more models representative of the one or more resources (see page 4, lines 7–8).

As to claim 29, Bigus discloses a method wherein the one or more service level metrics are obtainable from one or more <u>service level agreements</u>. (See "<u>Optimization and Regulator policies</u>" in page 3, last paragraph).

As to claim 30, Bigus discloses a method further comprising the step of obtaining a topology of one or more resources used to deliver one or more services associated with the one or more service level agreements, including the resource for which the model is being constructed, for use in constructing the model representative of the resource (see page 18, last paragraph). As per the topology definition in (Application description page 7, 4th paragraph), Examiner interprets "scheduling different classes of customers on a set of distributed, heterogeneous servers to globally minimize a linear function of the per-class mean response times" as minimal set of resources that may be used in service delivery and the flows between them.

As to claim 31, Bigus discloses a method wherein the resource is an element of an autonomic computing environment (see page 19, lines 3–8). As per the autonomic definition in (Application description page 10, 1st paragraph), Examiner interprets "AutoTune, an agent-based approach to automated tuning … An AutoTune enabled target system exposes metrics for workloads (e.g., RPC arrival rates), configuration (e.g., processor speeds), and service levels (e.g., response times) as well as a means to manipulate tuning controls (e.g., admission control parameters). Our approach is to construct a generic model of the target system (e.g., by training a neural network) and

from this derive a controller" as one of the goals of autonomic computing is to automate some or all of the tasks an operator would typically carry out.

As to claim 32, Bigus discloses a method wherein the constructed model is useable for (i) reporting one or more service level metrics (see page 1, lines 5–7) and (ii) automating service level compliance (see page 13, line 11).

As to claim 33, Bigus discloses a method further comprising the step of checking the accuracy of the one or more constructed models (see page 6, next to last paragraph, last 3 lines).

(10) Response to Argument

Evidence Appendix

The Declaration of Prior Invention Under 37 C.F.R. §1.131 contained in the Appendix to the brief is correct.

However, as per MPEP § 715 [R-3](b) II(A), an affidavit or declaration under 37 CFR 1.131 is not appropriate where the reference publication date is more than 1 year prior to the effective filing date. Such a reference is a "statutory bar" under 35 U.S.C. 102(b) as referenced in 37 CFR 1.131(a)(2). All claims are rejected under 102(b) as being anticipated by a reference which was publicly available in 2000. The 131 Affidavit does not antedate the effective date of such reference, since is swearing behind July 3, 2002.

Prior to addressing specific arguments by appellant, the Examiner would like to point out that throughout the prosecution of this application, Appellant's arguments have been more specific than the claims language. Appellant has argued (and argues) features which are not expressed in the claims. The MPEP cautions that limitations should not be read into the claims. The Examiner is not allowed to bring limitations set forth in the description into the claims. Although a claim should be interpreted in light of the Application description disclosure, it is generally considered improper to read limitations contained in the Application description into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 Fed. Cir. 1993, In re Prater, 415 F.2d 1393, 162 USPQ 541 (CCPA 1969) and In re Winkhaus, 527 F.2d 637, 188 USPQ 129 (CCPA 1975), which discuss the premise that one cannot rely on the Application description to impart limitations to the claim that are not recited in the claim.

It should be noted that the Examiner previously considered these arguments and provided a response to these arguments via the Office Action and the Advisory Action. While Appellant argues with respect to the Examiners position set forth in the Office action and Advisory Action, the Examiner stands by the position presented in the Office action and Advisory Action and the content of which is set forth below. Appellant's arguments should not be found persuasive. The Examiner was (and is) simply setting forth additional reasonable interpretations of the pending claim language that one of ordinary skill in the art could consider.

Appellant's basis for most arguments stem from alleged definitions of several terms in the claims. However, in various locations in the Application description: a)

Some of these terms are either merely repeated without any special meanings elaborated. b) Other definitions of such terms are not ruled out, since only examples are given of what some of these terms may be, may do, or may include. Merely a) repeating or b) giving examples of what some of these terms may be, may do, or may include does not rise to a level of a definition of a term. In the absence of an elaboration of any special meanings for some of these terms in the claims and Application description, there are no distinguishing features claimed. Therefore throughout the prosecution of this application, the claims have been given a broad reasonable interpretation in light of the Application description according to definitions of these terms well known to any one of ordinary skill in the art or according to any of these terms' examples in the Application description.

A case in point is examples given in various locations of the Application description of what a "resource abstract model (RAM)" may be, may do, or may include:

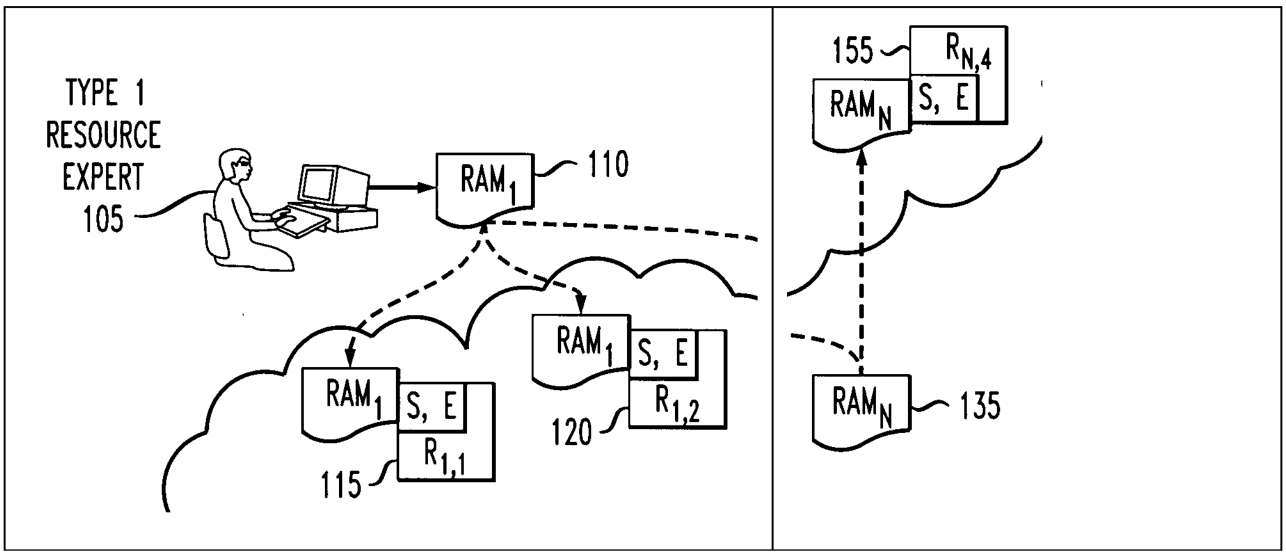
> RAMs facilitate model discovery in that they can greatly reduce the data collected for model construction, a consideration that, if not addressed, can significantly limit the extent to which model discovery is practical (see page 8, lines 8–10)
> In accordance with the present invention, RAMs provide a way to reduce the number of metrics considered in advance of data collection. This can be done in several ways (see page 8, lines 19–21)
> Thus, a RAM may be considered a computer readable description of one or more metrics. A simple example of such a description is specifying that response time is composed of CPU (central processing unit) execution times and delays for CPU, I/O (input/output) and memory (see page 9, lines 7-8)

The passages on page 8, lines 8–10 and page 8, lines 19–21 of the Application description do not rise to a level of a definition of "a resource abstract model", they are just examples of a what a resource abstract model may do.

The passage on page 9, lines 7-8 of the Application description does not rise to a level of a definition of "a resource abstract model", it is just one example of a resource

abstract model. Examiner notes that other definitions of “resource abstract model” are not ruled out, as indicated by use of the term "may be".

Examiner would like to refer to the summary of the claimed invention as set forth in page 4, 2nd paragraph of the appeal brief “a resource abstract model (e.g., 110 and 135 in FIG. 1)”. Now as pointed to by Appellant, Examiner would like to refer to item Nos. 110 and 135 in FIG. 1:



The blocks of item Nos. 110 and 135 in FIG. 1 do not rise to a level of a definition of "a resource abstract model", they are nothing but graphical depictions with a label reading “RAM”, i.e. a resource abstract model. In the summary of the claimed invention as set forth in the appeal brief, Examiner does not see another definition of a “resource abstract model”.

Based upon these passages, it's clear that Appellant’s own Application description lacks a clear definition of a “resource abstract model”. Which one of the passages allegedly elaborating a definition of a resource abstract model should the Examiner use to determine any distinguishing features claimed?

Additionally, the Examiner would like to point out that the Examiner, throughout the prosecution of this application, applied art in accordance with the guidance set forth in MPEP § 2131, "The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required".

The grounds of rejection and the application of the art have not changed and the arguments should not be found persuasive and the Board of Appeals should find in favor of the Examiner rejections of the pending claims in the instant application.

Regarding the rejection of claims 1–5, 7–14, 16–23, 25–29, and 31–33

a) Appellant notes, (see page 5, last paragraph to page 6, 1st paragraph), 'the present Application description at page 9, lines 7-8, indicates that a resource abstract model "may be considered a computer readable description of one or more metrics"'. Examiner notes that other definitions of resource abstract model are not ruled out, as indicated by use of the term "may be".

b) Appellant argues, (see page 6, 2nd paragraph to page 7, 1st paragraph), that Bigus fails to teach or suggest "wherein the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model

representative of the resource such that a reduced set of resource metrics is considered".

Examiner would first like to refer to the summary of the claimed invention as set forth in page 2, last paragraph of the appeal brief “As described in the Application description at, for example, page 8, line 8, to page 9, line 9, the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered”.

Now as pointed to by Appellant, Examiner would like to refer to the Application description’s page 8, line 8, to page 9, line 9 which state the following:

“RAMs facilitate model discovery in that they can greatly reduce the data collected for model construction, a consideration that, if not addressed, can significantly limit the extent to which model discovery is practical. To appreciate the concern here, consider the IBM DB2 database management system. In an enterprise system, there may be multiple instances, each collecting approximately 500 metrics available through the performance monitor. Other software components (e.g., application servers, web servers, operating systems, Java Virtual Machines) collect a large number of metrics as well. Thus, it is not uncommon to have tens to hundreds of thousand of metrics to consider when constructing a quantitative model. Using purely data driven techniques requires collecting data for each metric so that its contribution to a quantitative model can be evaluated. Unfortunately, data collection is time consuming and storage intensive.

In accordance with the present invention, RAMs provide a way to reduce the number of metrics considered in advance of data collection. This can be done in several ways.

A first illustrative technique is to use the RAM to expose properties of variables. For example, some variables are counters that are always incremented (e.g., time since last boot, number of bytes received) and others are gauges (e.g., CPU utilization). Typically, models require that the first difference of counters be taken before incorporating them into a quantitative model. By including a property that indicates if a metric is a counter or a gauge, it is known which metrics must be differenced. Otherwise, all metrics must be differenced, which essentially doubles the number of metrics to consider.

A second illustrative technique is to consider the logical groupings of variables that are present in RAMs. For example, in the DB2 performance monitor, variables are organized by component such as buffer pools and tablespaces. This structure provides a way to select logically complementary variables rather than including all variables.

Thus, a RAM may be considered a computer readable description of one or more metrics. A simple example of such a description is specifying that response time is composed of CPU (central processing unit) execution times and delays for CPU, I/O (input/output) and memory”

In these passages pointed to by Appellant, Examiner sees examples of what a “resource abstract model” may be, may do, or may include. Examiner also sees that

these passages do not rule out other definitions of the term “resource abstract model”. However, Examiner does not see a clear definition of the limitation in question “wherein the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered”. More specifically, Examiner does not see a clear definition of definition of “automatic”. Based upon these passages as pointed to by Appellant, it's clear that Appellant’s own Application description does not define the limitation of “wherein the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered”.

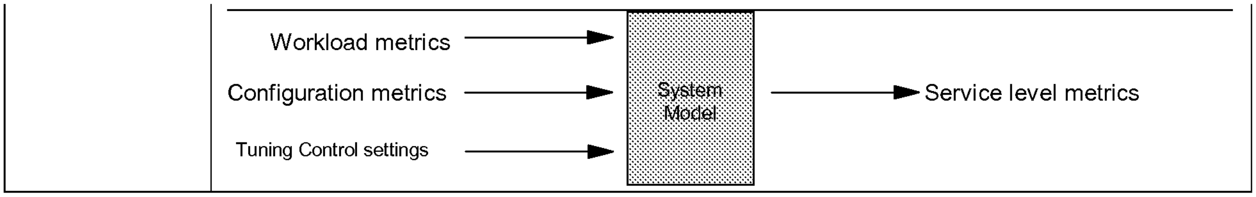
In a) Appellant noted one of many definitions of resource abstract model. In b) without highlighting any distinguishing features claimed, Appellant argues that Bigus fails to teach the limitation of “wherein the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered”. Examiner notes that the resource abstract model in a) is a small subset of the argued limitation in b). Based upon a), it's clear that Appellant’s own Application description lacks a clear definition of a “resource abstract model”. Should the Examiner use the alleged definition in a) to determine any distinguishing features claimed of the argued limitation in b)? Appellant arguments have been (and are) more specific than the

claims language. Appellant has argued (and argues) features which are not expressed in the claims or clearly defined in the Application description. Examiner is not allowed to read into the claims express limitations and especially to implied limitations contained in the Application description.

Examiner would now like to point out what the examiner relied upon to provide a teaching for claim limitation “wherein the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered”.

Examiner interpreted/s or equated/s the limitations recited in claim 1 to Bigus as follows:

claim 1	Bigus, page 11, lines 6–10
Resource abstract model	neural prediction agent
is configured to automatically determine a set of resource metrics to be used to	The agent provides high-level functionality through its Customizer as it orchestrates the operation of the four AbleBeans contained in it. The user need only specify the source data file (and a corresponding meta-data file). The neural prediction agent then **scans the source data and automatically** generates the scaling and transformation templates used by the AbleFilters to pre- and post- process the data going into and out of the neural network. Based on the number of inputs and output fields and their data representation, the neural network architecture is **automatically** configured.
claim 1	**Bigus, page 5, last paragraph and Fig. 3**
construct a model *representative of the resource* such that **a reduced set of resource metrics is considered**	The current implementation of the generic controller draws heavily from intelligent control. Our starting point is the target’s system model. ***As shown in Figure 3, the system model is an abstraction*** *of the target that outputs service levels* **given inputs for workload, configuration, and settings of tuning controls**. This model can be constructed using various learning approaches that enable different control algorithms to be employed. In our current prototype, the system model is obtained by training a neural network based on measured values of the controlled target over a wide range of workloads and tuning controls. Figure 3: AutoTune System Model



That is, Examiner interprets Bigus's "neural prediction agent" as "the resource abstract model", Bigus's "scans the source data and automatically" as " is configured to automatically ", Bigus's "scans the source data and generates the scaling and transformation templates used by the AbleFilters to pre- and post- process the data going out of the neural network" as " determine a set of resource metrics to be used to", Bigus's "the system model is obtained" as "the system model is an abstraction" and "construct a model", Bigus's "As shown in Figure 3, the system model is an abstraction of the target that outputs service levels" as "representative of the resource such that", and Bigus's "As shown in Figure 3, the system model is an abstraction … given inputs for workload, configuration, and settings of tuning controls" as "a reduced set of resource metrics is considered". Therefore, it is the Examiner's position that Bigus teaches "wherein the resource abstract model is configured to automatically determine a set of resource metrics to be used to construct a model representative of the resource such that a reduced set of resource metrics is considered" as claimed.

Appellant notes, (see page 7, 4^{th} to 5^{th} paragraphs), that "where a definition is provided by the applicant for a term, either explicitly or by implication (i.e., according to the usage of the term in the context in the specification), that definition will control

interpretation of the term as it is used in the claim” and ‘Accordingly, Appellants are not attempting to read limitations from the Application description into the claims, but rather are interpreting the claim in light of the specification. If "words that are used in the claims [are] defined in the specification," these definitions from the specification "must be imported into the claims to give meaning to disputed terms"’.

Examiner is not allowed to read into the claims neither limitations contained in the Application description. The Examiner's position applies to express limitations and especially to implied limitations.

Regarding the rejection of claims 6, 15, 17, 24, and 30,

Appellant argues, "for the reasons given above with respect to claims 1, 11, 20 and 27”, (see page 8, 4th paragraph). Appellant’s arguments should not be found persuasive, see refutal of claim 1 above.

Additionally, Appellant argues that Bigus fails to teach "obtaining a topology of one or more resources used to deliver one or more services associated with the one or more service level agreements”, (see page 8, 5th paragraph to page 9, 3rd paragraph).

The current rejection of claim 6 reads:

> Bigus discloses a method further comprising the step of obtaining a topology of one or more resources used to deliver one or more services associated with the one or more service level agreements, including the resource for which the model is being constructed, for use in constructing the model representative of the resource (see page 18, last paragraph). As per the topology definition in (Application description page 7, 4th paragraph), Examiner interprets “scheduling different classes of customers on a set of distributed, heterogeneous servers to globally minimize a linear function of the per-class mean response times” as minimal set of resources that may be used in service delivery and the flows between them.

Bigus' page 18, last paragraph discloses:

"As a simple example, consider the problem of scheduling different classes of customers on a set of distributed, heterogeneous servers to globally minimize a linear function of the per-class mean response times. A specific instance of this general problem arises in scalable Web server systems, supporting differentiated services, where incoming requests are immediately routed to one of a set of computer nodes by a high-speed router, and each node independently executes the customers assigned to it following a local sequencing algorithm [Dias et al]. A fluid-model formulation of the optimization problem is considered in [Sethuraman & Squillante]. This analysis establishes that the optimal sequencing strategy at each of the servers is a simple priority policy and that the globally optimal scheduling problem reduces to finding an optimal routing matrix [p(i,j)] under this sequencing policy, where p(i,j) denotes the fraction of class i fluid routed to server j. The latter optimization problem is formulated as a nonlinear programming problem, which is shown to have at most one solution in the interior of the feasible domain; moreover, any local minimum in the interior is a global minimum. These results significantly simplify the solution of the nonlinear programming problem using standard optimization methods. The routing fractions p(i,j) of the optimal fluid control policy can then be used to set the tuning controls for the weighted round-robin scheme employed at the front-end router of scalable Web server systems."

In order to relate response times to service level, Examiner would further like to refer to Bigus' page 4, 1st paragraph, which discloses the following:

"…Service level metrics characterize the performance delivered, such as response times, queue lengths, and throughputs."

In order to relate response times to service level and resource abstract models (RAMs), Examiner would like to refer to the Application description, which discloses the following (emphasis added):

Thus, <u>a RAM</u> may be considered a computer readable description of one or more metrics. A simple example of such a description is <u>specifying that response time</u> is composed of CPU (central processing unit) execution times and delays for CPU, I/O (input/output) and memory (see page 9, lines 7-8)

"It is to be noted that some of the resources in enterprise system 102 may be special types that are used for management purposes and not for a business function. For example, response time probes 140 (R_P) are resources that simulate end user interactions to collect <u>response time information that is used to assess compliance with service level agreements</u>. Another special resource may be a workload generator 145 (R_W) that can create large volumes of synthetic transactions to examine the impact on response times and resource metrics for loads that are not currently being generated by the actual end users" (see page 10, last paragraph)

Examiner would now like to point out what the examiner relied upon to provide a teaching for claim limitation "obtaining a topology of one or more resources used to

deliver one or more services associated with the one or more service level agreements”.

Examiner interpreted/s or equated/s the limitations recited in claim 6 to Bigus as follows:

claim 6	Application description page 7, 4th paragraph	Bigus (page 18, last paragraph)
obtaining a topology of one or more resources used to *deliver* one or more **services associated with the one or more service level agreements**	By topology, it is meant to refer to the minimal set of resources that may be used in service delivery. More detailed topologies specify the resources actually used and the flows between them	*Scheduling* different classes of customers on a set of distributed, heterogeneous servers to globally minimize a linear function of the per-class **mean response times**

Examiner interprets Bigus’s “scheduling” as “deliver”, Bigus’s “minimize a linear function of the per-class” as “a topology of one or more resources” (a minimal set of resources that may be used in service delivery), and Bigus’s “mean response times” as “services associated with the one or more service level agreements”. Therefore, it is the Examiner's position that Bigus teaches “obtaining a topology of one or more resources used to deliver one or more services associated with the one or more service level agreements” as claimed.

Finally, the Examiner has given the claims a reasonable interpretation in light of the definitions disclosed in the Application description and has applied art in accordance with the guidance set forth in the MPEP and has not read any additional limitations into the claims, therefore the rejections should be held as proper and the claims should stand rejected.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/JUAN C OCHOA/

Juan Carlos Ochoa

Simulation & Emulation, Art Unit 2123

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123

Conferees:

Eddie C. Lee,
TQAS/Appeals Specialist, TC 2100

Paul L. Rodriguez,
Supervisor Patent Examiners TC2123
/Paul L Rodriguez/
Supervisory Patent Examiner, Art Unit 2123
/Eddie C. Lee/
Supervisory Patent Examiner, TC 2100